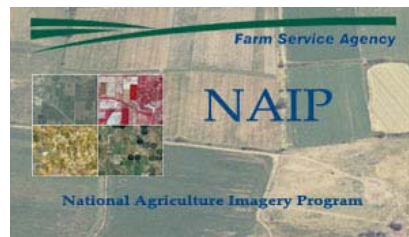


Montana Digital Ortho Imagery Partnership Project

A proposed partnership between the Farm Service Agency's National Agricultural Imagery Program (NAIP) and a coalition of federal, state, local, tribal and private entities in Montana

What is NAIP?



The National Agricultural Imagery Program (NAIP) acquires imagery during the agricultural growing seasons in the continental U.S. A primary goal of the NAIP program is to enable availability of digital ortho-photography within a year of acquisition.

NAIP imagery can be acquired under two sets of specifications: A one meter ground sample distance (GSD) with a horizontal accuracy that matches within three meters of a reference ortho image, and a two meter GSD image that matches within 10 meters of reference ortho imagery. The reference ortho imagery is mosaicked digital ortho quarter quads (DOQs) that were used to digitize USDA FSA common land unit boundaries.

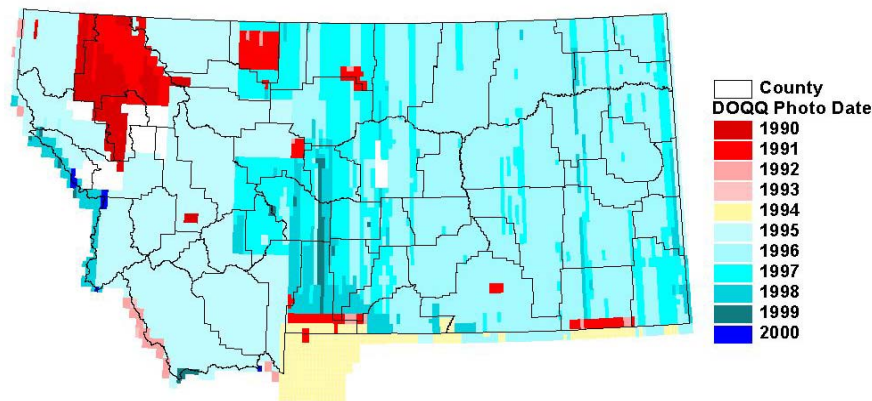
The one meter GSD NAIP imagery is intended to provide updated digital ortho-photography.

Why does Montana need updated digital ortho-photography?

Digital ortho-photography is a primary component of the Montana Spatial Data Infrastructure and is used in the following ways:

- Background imagery for GIS applications
- Source data for identifying structures, error checking other gis layers (roads, streams, etc.)
- Critical component for wetland, vegetation and landuse mapping
- Wildfire response
- Homeland security for planning / response / mitigation (county emergency response plans, electric transmission and distribution maintenance and planning, pipeline maintenance, etc.)
- The FSA uses digital ortho-photos to assist in tracking producer records at county field offices.
- The Forest Service employs digital ortho-photos as a means to more accurately map and inventory the national forests.
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Montana's existing ortho-photography is dated making it less reliable for use in applications. The Montana landscape has changed since the original photography was acquired.



What does the NAIP ortho-photography look like?

There are two products that the Montana GIS Community, at an initial meeting of interested potential partners, expressed partnership interest in. The first is the one-meter natural color product and the second is the one-meter color infrared (CIR) product. Natural color is easier to interpret by those not experienced in CIR, while CIR has greater utility in wetland and vegetation identification and mapping. The CIR product will only be available if Montana is flown using digital (as opposed to film) photography. The photography is usually flown in the summer months and therefore does have full vegetative cover. FSA will collect a 2-meter product over Montana with or without partnership, however this product will not serve to update Montana's ortho-photography framework.



You can view a PowerPoint presentation that demonstrates the various NAIP products, including the 2-meter product by visiting the following web site, <http://www.apfo.usda.gov/NAIP.html> and following the directions in the last paragraph of the home page.

What will in cost Montana to partner with FSA?

The cost of the one-meter natural color product that would cover approximately 90% of Montana is estimated at \$2,400,000. If available, the cost of obtaining an accompanying CIR product is estimated at an additional \$300,000 to \$500,000 and no federal agency funding can be applied to CIR. The FSA estimates their portion of the cost share to be between \$800,000 and \$1,200,000. Since FSA's cost to collect the 2-meter product is estimated at \$1,800,000, which they would have to go alone, Montana believes that \$1,200,000 is an appropriate cost share on their part. That would leave \$1,500,000 to \$1,800,000 for Montana the partners to share. Estimated federal commitments from the NRCS, USFS and USGS may total as much as \$900,000 with potential from other federal agencies like BLM to add to that total. Therefore, Montana state agencies, local governments, tribes and the private sector need to raise an estimated \$500,000 to \$800,000. As of December 1. 2005, we are aware of approximately \$200,000 in state funding that has been tentatively committed.

How can my organization help?

Time is of the essence to gain commitments for the remaining funds Montana needs to partner in this project. We are looking to obtain full commitment by February 2005. If your organization would be willing to join the NAIP Ortho-imagery Coalition please call:

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